

CLAIMS

1. A substance that inhibits the binding of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof, to a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof.
2. The substance according to claim 1, wherein the substance is an antibody to a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof.
3. The substance according to claim 1, wherein the substance is an antibody having the activity of neutralizing cancer cell growth stimulation induced by the binding of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof, to a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof.
4. The substance according to claim 2 or 3, wherein the antibody is a monoclonal antibody.
5. An agent for preventing/treating cancer, which comprises the substance according to claim 1.
6. An agent for promoting the apoptosis in cancer cells, which comprises the substance according to claim 1.
7. An agent for inhibiting the growth of cancer cells, which comprises the substance according to claim 1.
8. An agent for inhibiting the growth of cancer cells, which comprises a substance that inhibits the activity of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof.
9. A substance that inhibits the activity of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof.

10. The substance according to claim 9, wherein the substance is an antibody having the activity of inhibiting phosphorylation of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof.

11. The substance according to claim 10, wherein the substance is an antibody having the activity of neutralizing cancer cell growth stimulation induced by the binding of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof, to a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof.

12. An agent for preventing/treating cancer, which comprises the substance according to claim 9.

13. An agent for promoting the apoptosis in cancer cells, which comprises the substance according to claim 9.

14. An agent for inhibiting the growth of cancer cells, which comprises the substance according to claim 9.

15. A method of screening a substance that inhibits the binding of (a) a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof, to (b) a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof, which comprises using (a) said protein, its partial peptide or a salt thereof, and (b) said protein, its partial peptide or a salt thereof.

16. A kit for screening a substance that inhibits the binding of (a) a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof, to (b) a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof, which comprises (a) said protein, its partial peptide or a salt thereof, and (b) said protein, its partial peptide or a salt thereof.

17. A method of screening a substance that inhibits the activity of a protein comprising the same or substantially the same amino acid sequence as the amino acid

sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof, which comprises using a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof.

18. A kit for screening a substance that inhibits the activity of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof, which comprises a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof.

19. A method of preventing/treating cancer, a method of promoting the apoptosis in cancer cells and/or a method of inhibiting the growth of cancer cells, which comprises inhibiting the binding of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof, to a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof.

20. The method according to claim 19, which comprises using an antibody to a protein comprising the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof.

21. A method of preventing/treating cancer, a method of promoting the apoptosis in cancer cells and/or a method of inhibiting the growth of cancer cells, which comprises inhibiting the phosphorylation of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 26, its partial peptide or a salt thereof.

22. The method according to claim 21, which comprises using an antibody to a protein comprising the same or substantially the same as the amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 4, SEQ ID NO: 7 or SEQ ID NO: 10, its partial peptide or a salt thereof.

23. A method of preventing/treating cancer, a method of promoting the apoptosis in cancer cells and/or a method of inhibiting the growth of cancer cells, which comprises administering to a mammal an effective dose of the substance according to claim 1 or 9.

24. Use of the substance according to claim 1 or 9 to manufacture an agent for preventing/treating cancer, an agent for promoting the apoptosis in cancer cells and/or an agent for inhibiting the growth of cancer cells.